

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A DFB type semiconductor laser device comprising:
a laser part including an active layer and a clad ~~layer~~, layer;
a grating layer mounted on said clad layer and having periodic apertures; ,
an insulating layer mounted on said grating layer, ~~and an electrode layer laminated in~~
~~order~~, said the insulating layer including at least one elongated gap extending in a direction
transverse to a grating of said the grating layer; and
a metal electrode layer mounted on said insulating layer so as to contact through said
apertures of said grating layer with said clad layer within said gap so that the electrode layer
contacts the grating layer and the clad layer .

2. (Previously Presented) The DFB type semiconductor laser device according to claim
1, wherein the active layer is composed of at least InGaAsP and the clad layer is composed of
p-InP, and the grating layer is composed of InGaAs.

3. (Previously Presented) The DFB type semiconductor laser device according to claim
2, wherein the clad layer has a thickness equal to or thinner than 0.5 μm .

4. (Withdrawn) A method of manufacturing a DFB type semiconductor laser device,
comprising the steps of forming a laser substrate including at least a waveguide layer and a clad
layer; forming a grating layer on a top surface of the laser substrate; forming an insulating layer
having at least one through groove extending to the grating layer in a direction in which a
resonator of the laser device is formed; forming an electrode layer made of a high refractive
material on the insulating layer; and forming a further electrode layer on a bottom surface of the
laser substrate.

5. (Withdrawn) The method according to claim 4, wherein the step of forming the grating layer comprises the steps of forming a contact layer on the clad layer of the laser substrate, and removing a portion of the contact layer by lithography to form a plurality of parallel ridges aligning in parallel to one another in the direction in which the resonator of the laser device is formed.
